

NEW CULTIVARS

Keywords: cultivar: *Sarracenia* 'Chas' Brew', *Sarracenia* 'Cobra Nest', *Sarracenia* 'Scarlet Belle'.

Sarracenia 'Chas' Brew'

Submitted: 20 July 2002

Sarracenia 'Chas' Brew' is a *Sarracenia oreophila* × *Sarracenia rubra* subsp. *wherryi* cross that is a vigorous grower, and which rapidly produces new pitchers and crowns throughout the growing season (see Front Cover). Pitchers are 15-20 cm (6-8 inches) at maturity with physical features typical of both parents. Lid morphology is convex and triangular when viewed from above. Further, the width, length, and height of its lid is uniquely large 5 cm (2 inches) relative to the 2.5 cm (1 inch) diameter pitcher opening. Also noteworthy, the lid tilts slightly upward from the horizontal and the pitcher opening tilts slightly downward from the horizontal. This feature gives *Sarracenia* 'Chas' Brew' significant exposure to the inside of the pitcher. The entire pitcher has a pale yellow/green background with an orange lid in full sunlight. There is bold venation throughout the pitcher and lid, both internally and externally, similar to many clones of *Sarracenia oreophila*. Flowers have pale yellow petals without noticeable fragrance. Vegetative propagation is necessary to maintain the unique features of this hybrid.

The cross resulting in this plant was performed by Charles Brewer. The cultivar name ('Chas' Brew') is a pun on Charles' name.

—CHARLES BREWER • VA, USA • STEFAN PLOSAK • NC, USA,

Sarracenia 'Cobra Nest'

Submitted: 3 September 2002

Booman Floral announced the introduction of the world's first patented carnivorous *Sarracenia* hybrid, named *Sarracenia* 'Cobra Nest' (see Figure 1, page 26). The United States Patent office granted propagation protection to this new cultivar on August 6, 2002. *Sarracenia* 'Cobra Nest' is the first plant that was bred and selected to be easy to grow for consumers, and suitable for pot plant production by commercial growers. The fanciful name refers to the thick cluster of snake leaf traps.

This cultivar earned its patented status for its unique horticultural characteristics. It grows vigorously, year around, in a compact shape, about 25 cm (10 inches) tall. This is in contrast to many wild species, which turn brown in the Fall and go dormant. A flaring hood reflexes over the top of the hollow tube leaf. While ornamental, it is also a practical feature as it prevents leaf collapse when water or rain hits the plant from above.

Sarracenia 'Cobra Nest' is slightly more resistant to leaf edge browning from salt or fertilizer burn when compared to many wild species. Leaf traps open green, then turn red and maroon as they mature. The plant branches very freely, which gives it a full thick appearance, much appreciated by customers. Flowers are large with pink pendant petals, and white sepals, appearing after one year, in the summer.

Sarracenia 'Cobra Nest' is a hybrid that resulted from a six year collaborative breeding and selection program between me (Booman Floral), and Dr. Larry Mellichamp (University of North Carolina at Charlotte). Hundreds of thousands of seedlings were grown and evaluated during the selection process. The exact parentage of *Sarracenia* 'Cobra Nest' is unknown.

Developing commercially viable cultivars helps preserve the plants in the wild. Housing developments, pine plantations, and farming have encroached upon or destroyed most *Sarracenia* habitats. Poachers have wiped out many *Sarracenia* as well. By creating new cultivars that actually grow better for consumers and by growing them in nurseries, we hope to protect the remaining wild populations.

Booman Floral will have limited supplies of *Sarracenia* 'Cobra Nest' available through the retail web company www.plantsforkids.com beginning Summer 2003. Wholesale growers may order plugs for shipment in Fall of 2003.

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Sarracenia 'Scarlet Belle'

Submitted: 15 November 2002

Sarracenia cultivars can be found naturally, but the best are planned and then created by combining the best traits of two plants. Rather than just pairing two random plants and hoping for the best (which is usually a waste of time, energy, and resources), hybridizers plan and design characteristics into the final product. Such engineering resulted in *Sarracenia* 'Scarlet Belle.'

I was growing and selling plants for the retail and wholesale carnivorous plant trade via WIP (World Insectivorous Plants, circa 1976-1990) when I developed the hybrid cultivar that is finally being named *Sarracenia* 'Scarlet Belle'. It was one of two plants that I wanted to produce for collectors and the wholesale market. I sought to offer a *Sarracenia* that would exhibit the best of the genus by having a striking combination of vivid colors, as well as being a plant that would grow rapidly, perform well in shade or bright sun, tolerate soil moisture levels ranging from very wet to almost dry, maintain a compact form for easier and less destructive transport, and have an abundance of firm, long lasting, and intriguingly shaped pitchers. I was able to develop this showstopper by combining *S. leucophylla* and *S. psittacina* parents that fully met my design criteria. Only the single best plant from the progeny was selected for tissue culture replication.

Sarracenia leucophylla is noted as one of the best species of the genus for coloration and form. It has two pitching seasons, and grows well in wet or semi-dry open savannas. Unfortunately for my target goal, it is a rather tall species, and mature plants only produce a few pitchers at a time. Its counterpart for this pairing, *Sarracenia psittacina*, is a colorful low-growing rosette that prefers wet to soggy habitats. While *S. psittacina* plants can be found naturally in open locations, they seem to be more at home and are typically found in shady areas under shrubs or between tall grasses. One very desirable feature of this species is its propensity to produce an abundant quantity of pitchers that retain their color during the normal winter dormancy period.

Sarracenia \times *wrigleyana* is an uncommon, but naturally occurring hybrid (*S. psittacina* \times *leucophylla*) periodically found in Gulf Coast savanna bogs containing both parent species. I believe that the majority of *Sarracenia* \times *wrigleyana* plants result from crosses where the maternal parent is *S. psittacina*. This is because *Sarracenia* are protogynous, meaning the stigmas are mature and able to receive pollen before the stamens release pollen. Because of this, a *Sarracenia* flower is most likely to be pollinated by other flowers that matured earlier in the season. This aspect also serves to minimize self-pollination. Since *S. leucophylla* plants typically flower four to six weeks earlier than *S. psittacina*, natural crosses between these two plants are more likely to involve a slightly late-blooming *S. leucophylla* (pollen parent) and a slightly early-blooming *S. psittacina* seed parent. As further evidence for my theory, most of the wild *S. \times wrigleyana* plants I have observed were near a group



Figure 1: *Sarracenia* 'Cobra Nest'. Photograph James L. Booman.



Figure 2: *Sarracenia* 'Scarlet Belle'. Photograph by Michael Hunt.

of *S. psittacina* plants. I believe this indicates the seeds germinated directly from or near the seed parent, i.e. *S. psittacina*.

I wondered what the characteristics of *S. × wrigleyana* would look like if the parentage was reversed, i.e. if a *S. leucophylla* was the seed parent. From a production standpoint, *S. leucophylla* is a superior seed parent as it produces considerably more seed in the capsule than its counterpart. This aspect was important before the establishment of tissue culture reproduction for *Sarracenia*. Seed was the only viable means at that time to generate wholesale quantities of plants.

In the spring of 1985, I removed pollen from a very compact and maroon colored *S. psittacina* and used it to pollinate a number of crimson red *S. leucophylla* plants. Seed was harvested, cleaned, refrigerated, and stratified for sowing the following year. Plants were raised and then sold locally or exported to CRESCO, a major European carnivorous plant distributor at that time. I eventually stopped selling plants on a retail and wholesale level, but retained a few dozen of the most outstanding plants for my personal collection. It seemed that everyone who saw this particular hybrid wanted one. In retrospect, I should have attempted propagation by using the proven leaf extraction method that was used on rare forms of *S. psittacina*. I would simply pull off a full leaf or pitcher with some of the rhizome tissue, insert the bottom 3 cm into semi-moist chunky grade vermiculite, and enclose it in a humid terrarium. Roots would begin to form within four to six weeks. This vegetative propagation method might work on *S. × wrigleyana* because of its *S. psittacina* parentage.

A few years ago, I provided my best *S. × wrigleyana* plant to AgriStarts for consideration as an addition to their expanding carnivorous plant line. Mike Rinck was impressed with the sample and its pitcher retention during the winter months. He put the hybrid into AgriStarts' intensified tissue culture production program and it is now being sold in wholesale lot quantities.

Our son, Brian Hanrahan and his fiancée, Jennifer Kruse, selected the name 'Scarlet Belle' on August 7, 2002. I bestowed this honor on them as an endearing reminder of their wedding the following week. Jennifer is a "Belle" from Texas who incidentally selected a scarlet red color scheme for her wedding. These two facts, coupled with the plants natural coloration and "horn" or "bell" shaped pitchers, solidified the name selection.

Sarracenia 'Scarlet Belle' (see Figure 2, page 26) grows well in wet to semi-moist standard *Sarracenia* mixes. Coloration is best under full sun, but the plant tolerates and develops nice colors with lower light levels. It maintains pitchers throughout the year with some degradation in the winter months; growth spurts occur in the spring and late summer. It differs from typical *S. × wrigleyana* with its intense scarlet red pitchers and vigorous habit that produces a profusion of pitchers. The pitchers are up to 40 cm long, slightly conically tapered, with the mouth turned toward the center of the plant; the mouth opening is variable in aperture, from being totally closed to 5 cm wide × 3 cm high on mature pitchers and flared triangular in shape; prominent areoles descend decreasingly from the pitcher's mouth. All parts of the flower perianth are deep burgundy red; the size is intermediate between *S. leucophylla* and *S. psittacina*.

Older pitchers can be removed to stimulate new growth and to maintain the plant's esthetic balance. Reproduction should be done only vegetatively, i.e., by tissue culture, rhizome division, and leaf cuttings (if it works!).

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